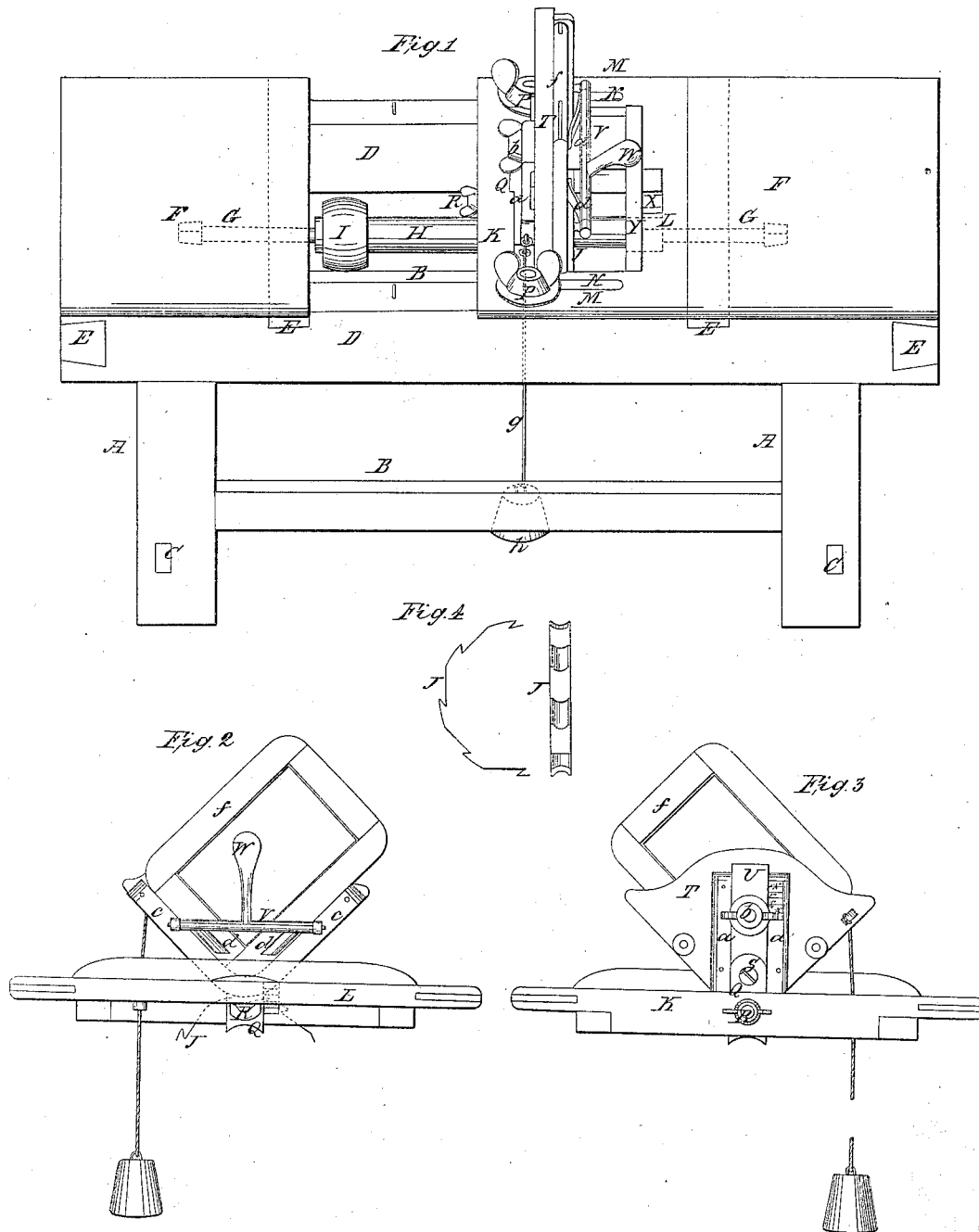


Sayre & Schull,
Wood Molding Machine,

No 50,170,

Patented Sep. 26, 1865.



Witnesses

James M. Fowler
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Inventor

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UNITED STATES PATENT OFFICE.

JOHN W. SAYRE AND ALEXANDER S. SHULL, OF MARTIN'S CREEK, PA.

IMPROVEMENT IN MACHINES FOR DRESSING EDGES OF SLATE-FRAMES.

Specification forming part of Letters Patent No. **50,170**, dated September 26, 1865.

To all whom it may concern:

Be it known that we, JOHN W. SAYRE and ALEXANDER S. SHULL, both of Martin's Creek, in the county of Northampton and State of Pennsylvania, have invented a new and useful Machine for Rounding the Edges and Corners of Slate and other Frames, &c.; and we do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is a perspective view of the front and top of the machine. Fig. 2 is the right-hand or front side of the carriage. Fig. 3 is the left-hand side of the carriage. Fig. 4 is a side and edge elevation of the cutter-wheel.

The nature of our invention consists in a rocking or vibrating frame to hold the slate or other frames, by means of a clamp or otherwise, and working in connection with a rotating cutter, for the purpose of rounding the corners of slate and other frames and other articles.

In the accompanying drawings, A A are posts connected by the bars B B and C C, which posts A A support the rails D D, which are connected by the cross-bars E E, partially shown in Fig. 1, the whole making a strong frame for the machine. About one-fourth of this frame at each end is covered by the boards F F, which form convenient tables to pile the slates and frames on to be worked by the machine. The two bars E nearest to the center of the frame are perforated for the screws G G, (shown by dotted lines in Fig. 1,) which screws are pointed and fitted to countersinks in the ends of the cutter-shaft H, and upon which it turns.

The cutter-shaft H has the pulley I fastened on it to turn the shaft and cutter J, which is also fastened to the shaft. The teeth of the cutter J are hollowed out to cut the edge of the slate oval or round and not leave any corners on the edge.

The oblong rectangular frame is made of two bars, K and L, and ends M M, and long slots N N through the ends for the bolts P P, which fasten the frame to the rails D D of the machine. The stand Q is fitted to a score in

the bar K, and provided with a slot for the bolt R, which fastens it to the bar K, either near to or far from the cutter-shaft, so as to round the corners of the slate-frames with a small or large circle. The upper end of the stand Q is perforated for the pivot S of the rocking or vibrating frame T to turn in. This frame T consists of a piece of plank about in the form of a quarter of a circle, with two cleats, *a a*, fastened to it, between which cleats the slide U is fastened by the bolt *b*, and the pivot S is fastened in the end of the slide, on which pivot the frame T vibrates when the corner of the frame T next to the cutter-shaft is rounded, and the cleats *c c* are fastened on the front of the frame T, in the position shown in Fig. 2, to govern the position of the slate-frame on the rocking frame while the corners are being rounded by the cutter J.

To clamp the slate-frame to the rocking frame the rock-shaft V is arranged to turn in two eyebolts passing through the cleats *c c* and fastened in the frame T. The rock-shaft V has an arm, W, by which it is worked, and two short arms, *d d*, which press the slate-frame *f* firmly against the frame T, and hold it there while the corner is being rounded by vibrating the rocking frame from one side of the machine to the other and carrying the corner of the slate-frame against the cutter J, which rounds it very perfectly. After the rocking frame has been vibrated from front to rear to round the corner of the slate-frame, it is drawn back by the cord *g*, fastened to it and the weight *h*, when the slate-frame may be released or unclamped and another corner put in the place of the one just rounded and the frame vibrated again; and this operation may be repeated until all the corners of the slate-frame are rounded. After the corners of a number of slate-frames have been rounded the bolts P may be loosened and the frame moved to the left against the pins *e e* and the bolts tightened. This will bring the bar L over the cutter J, which will work in the opening X in the bar, which is provided with a guide-cleat, Y, against which cleat the sides and ends of the slate-frame may be put as a guide and pushed over the cutter to round the edges of both sides and ends to correspond with the corners of the frame which have been previously rounded. There is a graduated scale, *i*, on the bar K, with an index-

point on the stand Q, and there is also a graduated scale on the cleat a, and an index-point on the slide U; and these scales and indices are so arranged that when the indices are set at corresponding divisions or figures on the scales the frame T can be vibrated just one-fourth of a circle to round the corners of slate-frames properly with the rotating cutter J.

Having described our invention and improvements so as to enable any person skilled in the art to which it most nearly appertains to make and use the same without further invention or

experiment, we will now state what we claim, and desire to secure by Letters Patent, to wit:

The frame T, arranged to vibrate, as described, and provided with a clamp, V, or its equivalent, and operated in connection with the rotating cutter J, for the purpose of rounding the corners of slate-frames.

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